UNITED STATES ENVIROMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

Attn: WW-16J

Christopher Korleski Director Water Division

April 29, 2018

Re: Public Notice No. 2NN-5PE0-MT3W, Aquila Resources Inc.

Re: Aquila Resources April 5, 2018 response and April 18 visit to EPA.

Dear Mr. Korleski,

My name is Mike Boerner and I am also a landowner with property directly adjacent to Aquila's proposed mine site. Tom Boerner wrote you a letter on April 26<sup>th</sup> and pointed out that Aquila has taken the liberty of telling the MDEQ and EPA that they will be locating three surface water monitoring stations on our property. In addition to the three on our property there are at least 4 additional monitoring sites that are also on private property to which they do not permission to access. There are 4 other monitoring sites that are in question as it appears that they are also on private property. So out of the 20 monitoring sites they listed only 4 of them are on property owned by Aquila. There are no monitoring sites on the other side of the river.

In a recent correspondence with the MDEQ, Aquila references wetlands that are connected to wetlands that we own and of which I am very familiar with and have walk them frequently. I have also been involved with water monitoring the areas streams and Rivers for the past 11 years. This was done as part of a water monitoring grant provided by the MDEQ and is conducted through the University of Wisconsin at Marinette. As Tom pointed out wetland C1 is the headwater to a trout stream that runs through our property (I would estimate there to be over a mile of stream). Wetland C1 is also a critical source of water for a very large portion of our wetlands. The same holds true for wetlands 40/41 which are also connected and are major tributaries to our wetlands and the trout stream. The most recent wetlands application shows that these wetlands will suffer ground water drawdown as much as 2.5 feet. It's hard to believe that they will be able to drawdown just the wetlands on their property and not impact the 100's of acres of our wetlands which are connected. Our stream has already been impacted by the logging activity that took place by the previous landowner just prior to selling the property to Aquila.

Attached are water balance spreadsheets for wetlands 2b, 6, 40/41, A1East, A1West, B1 and C1 Lobe on the Aquila Back Forty site. As you requested, these water balances use a version of the Pierce water balance approach that assumes; (1) there is no surface runoff contribution to the wetlands other than snowmelt and one November rain event of 2.5 inches, and (2) an infiltration rate of 6 inches per month. As you know, we have a good faith difference of opinion about whether either of these assumptions reasonably reflect regional conditions or actual hydrology on the Back Forty site and whether or not these assumptions accurately portray potential indirect impacts. These differences aside, we appreciate the time you have put into this effort and are therefore proposing a solution to this issue that attempts to take into account all of the effort that you and your staff, as well as our client and consulting team have put into resolving this issue over the past year.

In the same correspondence Aquila makes the argument that the impact will be toward the end of the mines life and that most of the impacts will be temporary and it may actually benefit at least the trees in these wetlands. These wetlands are mostly a cedar swamp that relies heavily on these water sources and is the reason for their existence.

While it would be possible to continue to generate new estimates of potential indirect impact by using different water balance models and/or combinations thereof by modifying the inputs into those models and making different calculations of acres of impact based on the outputs of these models, we think it is important to add context here and evaluate this important issue from a broader perspective. In our view, continuing to orchestrate differences of a few to several acres in estimated potential impacts is not as useful as focusing on actual practical considerations associated with the project and their interplay with the ultimate impacts to regulated aquatic impacts that the Back Forty Project will have. In that regard, we again emphasize that these indirect impacts—to the extent they are actually realized at all—will not occur until late in the mine life. Those impacts will only start occurring a few years before commencement of reclamation, andwell after a few to several years of continued wetland monitoring and assessment. Such monitoring and assessment will provide Aquila (and MDEQ) with voluminous additional data and insight into area hydrology, the impacts of mine operations on that hydrology and refinement of adaptive management priggers and techniques that would mitigate or prevent any such impacts. Further, most if not all of these impacts would be temporary in nature, ending once reclamation is complete. Finally, since we are primarily dealing with forested wetlands, any impacts or temporary changes to wetland hydrology related to reducing water inputs during the growing season may actually serve to temporarily benefit at least the trees in these wetlands.

The comments from Aquila are inconsistent. Aquila is telling the public there will be an open pit and underground mine with a mine life that will be 16 years but their permit only considers the open pit portion with a mine life of 7 years. They claim that the impacts to the wetlands will be near reclamation and temporary but it is clear that they want to alter the permit and the mine life is likely to be 16 years. That means the impacts are nowhere near the reclamation or closure of the mine and the temporary impact is significantly extended. Attached is a recent article/interview where they are claiming that it will be both open pit and underground mine with a mine life of 16 years.

Another point that I would like to make is It appears that all the ground water drawdown models omit any impact that will occur past the Menominee Rivers edge which is Wisconsin (ordinary high water mark) and onto the other side of the river. Aquila's modeling needs to go beyond the 150-feet from the edge of the pit and reflect the impacts to the properties located in Wisconsin.

To put this into perspective my family owns the property to the North and Northeast of the mine site and the other impacted land owners (Marla Tunistra, etal) own the land to the south of the mine site.

I appreciate your time and please feel free to contact me if you have any questions. I would be happy to travel to your office in Chicago to discuss the matter further.

Michael Boerner

Comments of Robin Quigley, communications manager, Aquila Resources, Inc., to the Operation Action U.P. annual meeting January 25, 2017.

Note: There were two presenters at the session, Robin Quigley and Tim Lubbers of SEMCO ENERGY Gas Company. Ms. Quigley makes references to slides that were shown to the audience but are not reproduced here.

Hello everybody. I am Robin Quigley, communications manager with Aquila Resources. I was here a couple of years ago. Things have progressed quite a bit. Thank you for having me come back. First of all I want to just go through a little bit of background just in case people don't know what the Back Forty project is. We are a public company so I do have to say that there is always a disclaimer, just saying that this is what we believe to be true but don't run out and buy stock or sell stock unless you do your own research.

We are actually currently expanding our management team. From Toronto we have Barry Hildred and Andrew Boushy. Tom Quigley is still our vice president for exploration – also my husband – he is also the qualified person who has to sign off on all technical documents. And then we just hired David Anderson as our director of environmental and regulatory affairs, and he is coming over from Highland Copper so I think some of you might know him.

So this is just a quick little slide. The UP is kind of based on mining but a lot of people don't realize that it takes 10,000 exploration projects to come up with one mine. And what we have done with the Back Forty project is from that actual exploration through the resource we spent about \$70 million already. We are now in the mine permitting stage of it. We've already spent an additional \$15 million just to get to where we are. And to construct this mine is going to be another \$261 million to construct. So that is a total of about \$350 million before we ever pull anything from the ground.

So of course we have very strong values. The most important thing for us is

safety and that is going to be where we first bring people in and make sure we have all of our safety in place before we start hiring too many people. And of course there is the environment, social responsibility, transparency and our personal commitment. My personal commitment is, I've been here from day one. So it was my husband discovered this so I was there from the very beginning and also to be, for the mine to be successful as well as to work with the community and hire locally.

So what the Back Forty project, or what the mine is, we have a zinc, gold, silver and copper mine – 40% zinc, 40% gold. To us that is a good thing because it shows that we don't have to be reliant on just one of the metal markets. If gold is up, zinc might be down. So we are very fortunate in that. The length of the mine is going to be about 16 years. It's going to be done in two phases, an underground – an open pit first and then an underground.

So, some of the economic impacts – we had a study done by the University of Minnesota-Duluth, that provided us with some of the - provided us with all of these economic numbers, actually. So for the tax revenue, we're figuring about \$20 million in annual tax revenue, and of that \$11.6 million will stay in the state and the local governments. And that revenue, of course, will support local schools, roads, other infrastructure. Besides the tax revenue, the state of Michigan owns some of the mineral rights, and of those mineral rights the state will get an additional \$13.6 million in the first seven years of operation, and that's only the open pit portion of it. We also figure that we will be hiring about 150 direct jobs. So these - well one thing I want to really stress is this is like a brandnew company, it's a brand-new company. We need everybody, not just miners, not just truck drivers, we need the whole thing. We need the safety, we need plant operators, we need administration people, we need accountants, it's the whole thing. So of that we're thinking 150 direct jobs with about 100 more indirect jobs, so that's people that, in grocery stores are going to need more people, restaurants, medical, all that.

So we are pretty excited about what this can do for the local community. So just in case you don't know where it is, you see, there's the state of Michigan. We are in Menominee County, and we are about nine miles west of Stephenson. We are on the border of Michigan and Wisconsin and we are close to the Menominee River. That's why some people are concerned about us. So here's the layout – the project layout. That round thing there, that is the open pit portion of it. That is the 83 acres, the entire pit there. We are 150 feet away from the river, where the furthest (sic) that the pit gets to the river is about 150 feet away. We've got the tailings and waste rock up on the right-hand side there. Down below all the dirt that we take to get down to the rock itself, we will be storing that and then once it's all backfilled in we will be using the same overburden and the same rocks – or the same dirt to fill it back in. That entire footprint is about 580 acres.

Right there I just kind of want to show, kind of the heavier green, there's just a little thing, that's where the processing plant is going to be. And I'm going to show you a little bit more about that but I just want you to see the scale of what that is. Okay, so like I said the first phase is the open pit phase. That's what our current permit applications are in for. We have received the Part 632 mining permit as well as the air-quality permits. We also have the NPDES which is the discharge

permit in and it is being reviewed right now. We hope to hear from the state in the next couple of weeks, and we have just submitted the wetlands permit. And we hope to hear back on that – it will go through a public comment period and everything that we just did for the Part 632 permit, but we hope to get that in June.

Then of course, that \$261 million that I was talking about, that's Barry's job - our CEO – to raise that capital and then after we start with the open pit we will be doing further exploration work to start working on the underground – the underground portion of it is an additional eight years, that's why we have the 16 year total, but we still don't know where - where the bottom of the ore body actually is as you can see. So in this slide where you see the brown, that's the actual pit size so all that material that's inside of that pit will be taken out by the open-pit mining. You see the two top purple little things, little blobs up there? That is the gold mineralization, which comes right to the surface which is a wonderful thing for us as a company because that will generate funding and financing very, very quickly which helps us pay off that \$261 million, which actually we, the way that things are identified right now, we hope to have that initial capital cost paid off within the first two years. So it's a pretty significant -I think that's it. So just, yes the open pit itself is going to be about 750 feet deep at its very deepest. Of course it's cone shaped, so that 750 feet isn't next to the river, it's right in the middle of the cone. We will be reclaiming the entire pit using, we'll be backfilling it with waste rock - remember waste rock is just the rock that has no value in it at all - and as well as the tailings that do come from the, from the processing. The width and length of the pit is about 2100 feet wide and almost 2500 feet long – 83 acres, as I said, but in contrast the last iron ore mine that was proposed to go into operation that would have exceeded 500 acres just for the pit itself. So as you can see this is actually very small, 83 acres versus 500.

During our permitting process we designed, we are designing everything for the worst-case scenario. As an example a 100 year flood. Also the only thing leaving our site will be the concentrated ore. We will not, none of the waste rock, none of the tailings, nothing leaves – the only thing that actually leaves our site is the concentrate.

This is a diagram, remember where I showed you that little, the processing plant, where that is? So this is a preliminary design we have. Over to the right are the stockpiles of the ore. Then it goes, going from right to left, that's our crushing, the crushing circuit, and then it's the fine ore stockpiles, and then the processing plant on the farthest left. This is a picture, starting from the right to the left, from the previous slide, this is the primary crusher, so we've got, there will be, because we have two different types of ore, we've got the gold and silver ore, we also have the zinc and copper ore, so they will actually be going into two separate processes. So it'll go into the primary crusher, these are closed circuits so that everything is enclosed there, none of the ore is exposed outside at all. It goes up into, it's kind of like a video game, kind of in a way, but it goes up into, after the primary crusher it goes up into a secondary crusher. There's two screens and what we need is to get everything below a half inch in size during this part of it. So it goes into the secondary crusher, anything that's less than a half inch will go into the stockpile, anything that's bigger will go into the tertiary

crusher and it just keeps going around in the circle until he gets to the right diameter and then from the stockpiles it will still be, new material will be added. So it goes into the secondary crushers, from there it goes into the fine ore stockpiles. Those two stockpiles, the one on top is the gold-silver stockpile, the one on the bottom will be the zinc and copper stockpile.

Next, okay so this is the actual processing plant. Now, the one on the right hand side is the gold and silver, so it's kind of tipped over a little bit, and from there, that's the gold and silver. It goes in, it's crushed down to about 200 mesh, and what 200 mesh is you take a one inch square and there's 200 little holes in there and so that's how fine it has to get. So it will go through the cyanide leaching and from there it's made into a doré – there's a lot of stuff that happens but the end product is a doré, that's a gold and silver – it will be put into bars and an armored truck will, and take that off and take that away.

But then on the left-hand side we've got the sulfides, that's the zinc and the copper. So that's a flotation process which is very similar to what Eagle (mine) is doing right now, and from there it goes up and will be loaded out into the trucks – they will be closed trucks that go out, and we estimate seven truckloads per day of concentrate, so that's not a whole lot compared to Eagle which is transporting all of their ore.

So this is our timeline. We are in the permitting stage right now and we hope to have all of our permits by June of this year. We are also at this point working on our feasibility study and will be starting on our detailed engineering, probably Q-2 of this year, that's where we will be actually be designing our blueprints and finalizing what the processing plant is going to look at – look like. The middle of this year we'll also be starting the ordering of equipment – our procurement and then the construction activities will start once we get those permits – we have to wait til we get all four of them – as soon as we get those permits we can start with construction. The first part of that will be the logging portion of it, clearing of the land and after that it'll be putting down the liners, all the liners. Everything that you saw, all that equipment, all those tailing piles, everything, will be on a double liner system.

So if all goes well we hope to start commercial production Q-4 of 2019. It will be a two-year construction period.

So going forward currently we want to engage with community is much as possible. We want to find out what concerns are of the community, we want to educate the community, let them know what we are doing so that they can be a part of this at all times. Concerns that we have identified so far are truck traffic and routes, like I said there's going to be seven truckloads of concentrate per day on an average basis with about three to four truckloads of supplies coming in. Blasting times have been a concern. We figure will be blasting once every three days, so it's not that significant, we need to get that information out to people. And then we will be monitoring, definitely monitoring water wells, air discharge, all of that. But we also want to know what other people in the community, what their concerns are in their daily lives. So that's why we have open houses, we have different meetings all the time, trying to engage the community in identifying those concerns.

So that's it. Thank you very much.

Question: Are there likely other ore bodies in close proximity like the Eagle that

could extend the life of your mine?

Answer: Yes, and that's actually what Tom (Quigley) does. He is currently the exploration geologist, so not only are we looking deeper where the ore body is but we are looking another proximities as well.

Question: How certain is the second phase of the project? Is that something that is still being considered?

Answer: The underground? No, that definitely is what we plan to do. The permit though, right now, is only for the open pit portion of it because we still need to do some more drilling to find out exactly where it is so we want to do a bit more. But we know that, right now there's enough there that we are planning to move ahead with phase two.

Question: Where are you hauling the concentrate for processing? Answer: We have not identified that yet but it will be going out and probably loaded on railcars.

Question: One question that comes to mind for both of you (the two presenters) is, how can the private sector, the business community and the rest of the community leadership from the region be of assistance or support to you in your endeavors?

Answer (Robin): For us, you know, we have opposition. It's so wonderful to be able to talk to a group that is friendly. (Laughter). But for us it's support, just let your representatives and that sort of thing know. We will be going through another public comment period, so any kind of support we can get – of course the anti-people are just so loud and boisterous it sure would be nice to have other people in support, write letters and that sort of thing.

Question: Robin, you mentioned a transition with the CEO of Aquila. Can you talk a little bit more about that decision and what that individual brings to the table? Answer: The CEO? Yeah, Barry Hildred, he is our CEO, he is out of Toronto. He is a financial guru, that's his background so he will be – and there's not a transition with him, he is actually been our CEO for the last few years now. Before that, of course, it was Tom. Tom was the CEO for over seven years. We hired Barry specifically when we knew that the funding was going to be our next step, that we needed to get that funding. We knew it was going to be \$260 million plus to do this, so he has the wherewithal to do that. He has the right contacts and stuff so.

Question: Can you give us some insight into what you expect that capital campaign to look like to raising the funds to get you truly two commercial operation?

Answer: Yeah and that, actually we did just announce two days ago that we did a interim financing of \$6.6 million and that will get us through feasibility and then to put all the detailed engineering work together so we will have that. As far as the financing for the actual construction, we do have a company right now, Orion out of New York state. They have invested I think over \$20 million already, so we will do some of that financing also through them, they're very keen, of course they've got a lot at stake right now as well. They're very keen to keep funding. So it will be some of that, there will probably be some equity. There also could be some bankable loans.

Question: Robin, 150 new employees, that's great, I wish you were in my county. Where you think you look for those folks to hire them? Do you think we have the

talent locally, or little bit of both, how will it work?

Answer: We definitely are going to do as much local as possible. We'll probably do some job fairs, that sort of thing. We would like to start talking to some of the local universities. But yeah, we will hire as much local as possible. But of course there is going to be some engineers and that sort of thing that we will probably have to bring in. But you know, like I said it's like a brand-new business so we've got nurses, we've got accountants we've got, you know, so I think we'll be able to get a lot of people from there and you know the other thing, we get phone calls every single week from people that want to move back to the community, that want to move back. They left, they didn't have a job, but now they're having families, they want to come back into the community. So we are hearing that a lot.

Question: I know that a lot of your opponents to the mine are concerned about it being so close to the Michigamme (sic) River. I worked for Cleveland Cliffs for 30 years and my first job was at the Republic mine which is a heck of a lot closer to the Michigamme River than what are going to be to the Menominee River. And it successfully operated with no problems and no environmental concerns from 1959 to 1981. So I wish you luck but it's been done before in the Upper Peninsula. You might want to point that out to some of your opponents. Answer: Thank you. I appreciate that very much. Would you like to come to our public hearing? (Laughter).